Electrostatic Accelerators (Cont.)

Electrostatic Accelerators (Cont.) SOV/6536

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SUBJECT: Nuclear Engineering

Card 8/8 SK/zp/ef
4/15/64

VAL'TER, Anton Karlovich; ZALYUBOVSKIY, Il'ya Ivanovich; NEMETS, O.F., prof., otv. red.; VAYNBERG, D.A., red.

[Nuclear physics] IAdernaia fizika. Khar'kov, Izd-vo Khar'kovskogo univ., 1963. 367 p. (MIRA 17:5)

VAL'TER, A.K.; ZALYUBOVSKIY, I.I. [Zaliubovs'kyi, I.I.]; KLYUCHAREV, V.A. [Kliuchar'ov, V.O.]; AFANAS'YEV, V.D. [Afanas'iev, V.D.]

Measurement of the gyromagnetic ratios of nuclei in the excited state. Ukr. fiz. zhur. 8 no.9:933-945 S '63. (MIRA 17:8)

45015

S/089/63/014/001/006/013
B102/B186

24,6600

AUTHORS: Val'ter, A. K., Klyucharev, A. P.

TITLE: The isotope effect in the elastic scattering of protons from nuclei

PERIODICAL: Atomnaya energiya, v. 14, no. 1, 1963, 48-56

TEXT: In order to make an accurate study of the effect of nuclear structure on the elastic proton scattering, separated isotopes were investigated and measurements were made at E_p=5.4 and 19.6 Mev, using the linear accelerator of the Fiziko-tekhnicheskiy institut AN USSR (Physicotechnical Institute AS UkrSSR) in Khar'kov, and at E_p=6.8 Mev using the cyclotron of the Institut fiziki AN USSR (Institute of Physics AS UkrSSR) in Kiyev. In all cases the curves $\sigma(\theta)/\sigma(\theta)_c = f(\theta)$ were obtained, where $\sigma(\theta)$ is the measured scattering cross section; $\sigma(\theta)_c$ is the Coulomb scattering cross section. The protons were recorded by the nuclear photoemulsion and scintillation methods. The measured angular

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The isotope effect in the ...

distributions were compared in all cases with theoretical values calculated with the aid of an electronic computer according to the optical model. Results: No reliable results were obtained for the calcium isotopes Ca^{40} and Ca^{48} due to the oxidation of the target. Cr^{52} and Cr^{53} were bombarded with protons of 5.4 and 6.8 Mev; the angular distribution showed two maxima in all cases, the maxima being somewhat higher for Cr^{52}. The scattering observed on the even-even Cr^{52} with magic N was similar to that on Ca^{40} for 5.4 Mev. The following Ni isotopes 58, 60, 62, and 64 were used as targets. E_p was 5.4 and 6.8 Mev. At 5.4 Mev the angular distribution for the first three isotopes was alike and analogous to that on Ca^{40} and Cr^{52}. Ni^{62}, however showed an essentially lower scattering intensity at large angles. In this respect Ni^{64} behaves as an odd nucleus. At 6.8 Mev Ni^{58} and Ni^{60} behaved as Cr^{52} and Ni^{62} but as odd nuclei. In general the agreement with theory is good; a divergence appears for Ni^{60} at 5.4 Mev and for Co, Cu^{65},

The isotope effect in the ...

Zn^{64} and Zn^{68} at E_p=5.4 Mev. The angular distributions of all these isotopes were similar (two nearly symmetric maxima with a minimum at about 80°), though the Co and Cu nuclei were odd and the other two even. The agreement with theory is good except for Zn^{64} and large angles. The results show that the angular distribution $\sigma(\theta)/\sigma(\theta)_c$ for odd and even nuclei are different when N of the odd nucleus approaches a magic number. An odd nucleon blurs the nuclear surface and increases the absorption probability for an incident particle. Nuclei far from a magic region with even Z and nucleon pairs outside the closed shell, show such an effect. Whether (p,p) reactions with capture take place via compound nucleus formation or whether (p,p) or (p,n) reactions are more predominant depends essentially on the reaction thresholds which in turn depend on the parity. Nuclei with odd Z have lower thresholds; those with even Z but a small N-Z difference have higher thresholds. The anomalous increase of $\sigma(\theta)/\sigma(\theta)_c$ observed for some nuclei at large angles is a consequence of the elastic scattering with the formation of intermediate nuclei. The isotopes H^3, $He^{3,4}$, $Li^{6,7}$, N^{14}, O^{16}, Co, $Cu^{63,65}$,

The isotope effect in the ... S/089/63/014/001/006/013
B102/B186

$Ge^{73,74}$, $Cd^{111,113,116}$, $Sn^{116,117,118,119,120,122,124}$, $Pb^{207,208}$ and Bi were investigated at E=19.6 Mev. The results $\sigma(\theta)/\sigma(\theta)_c=f(\theta)$ are given also for the same isotopes that were investigated at lower E_p. The angular distributions had 3-4 maxima and minima which shows that it is a case of diffraction scattering which is well described by the optical model. There are 10 figures and 1 table.

SUBMITTED: September 13, 1962

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VAL'TER, A.K.; KOPANETS, Ye.G.; L'VOV, A.N.; TSYTKO, S.P.

Interpretation of the levels of the odd-odd P^{30} nucleus according to Nilsson's model. Izv.AN SSSR.Ser.fiz. 27 no.2: 228-231 F '63. (MIRA 16:2)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.
(Phosphorus isotopes) (Nuclear models)

S/048/63/027/002/011/023
B104/B160

AUTHORS: Val'ter, A. K., Kopanets, Ya. G., L'vov, A. N., and Tsytko, S. P.

TITLE: Investigation of the γ-radiation corresponding to the 1308 kev resonance in the $S^{29}(p,\gamma)P^{30}$ reaction

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 27, no. 2, 1963, 232 - 234

TEXT: The 1308 kev resonance was investigated using monoenergetic protons and a scintillation γ-spectrometer. The total characteristic of the NaI(Tl) crystal (70 mm diam., 50 mm high) was determined in careful preliminary studies so as to analyze the complicated γ-spectrum reliably. Fig. 1 shows a part of the spectrum corresponding to the resonance. From this spectrum and from the angular distribution of the γ-radiation the decay scheme shown in Fig. 2 was constructed, which corresponds to earlier published data (Tsytko, S. P., Antuf'yev, Yu. P., Zh. eksperim. i teor. fiz., 30, no. 6 (1956)). The most curious result is that the state with 2.4 Mev, with 2^+, decays by a γ-transition with 10% higher probability to the first

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excited level than to the ground state. There are 2 figures and 1 table.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk USSR (Physico-technical Institute of the Academy of Sciences UkrSSR)

Fig. 1. Hard section of the γ-spectrum corresponding to the 1308 kev resonance.

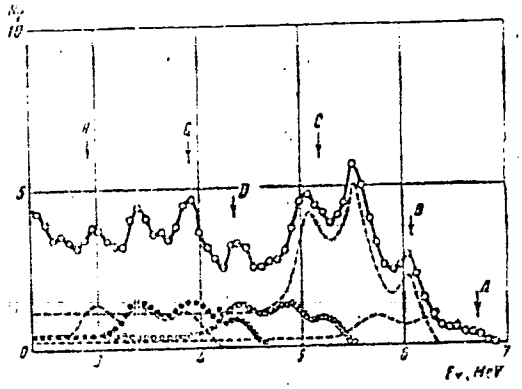

Fig. 1

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Investigation of the γ-radiation...

Fig. 2. Decay scheme of the P^{30} resonance level with an excitation energy of 6.827 Mev (E_p = 1308 kev).

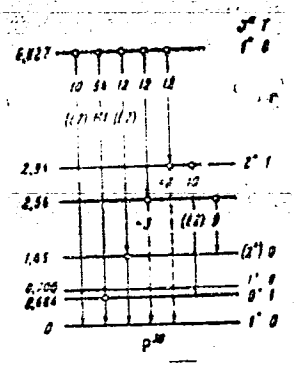

Fig. 2

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VAL'TER, A.K.; KOPANETS, Ye.G.; L'VOV, A.N.; STEGNER, A.; TSYTKO, S.P.

Study of the reaction $Mg^{26}(p,\gamma)Al^{27}$ at proton energies ranging from 1.8 to 2 Mev. Izv. AN SSSR. Ser. fiz. 27 no.11:1419-1426 N '63. (MIRA 16:11)

1. Fiziko-tekhnicheskiy institut AN UkrSSR. 2. Institut yadernykh issledovaniy, Varshava, Pol'skaya Narodnaya Respublika (for Stegner).

S/056/63/044/001/011/067
B108/B180

AUTHORS: Val'ter, A. K., Storizhko, V. Ye., Popov, A. I.

TITLE: Elastic scattering of protons by Mg^{24} nuclei

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44, no. 1, 1963, 57 - 62

TEXT: Protons with energies of 1450 - 4200 kev were extracted from an electrostatic accelerator and scattered by a target composed of 99%-pure Mg^{24} on a spectroscopically pure graphite backing. The scattered protons were recorded on a magnetic spectrometer with a CsI(Tl) crystal and an ФЭУ-19 (FEU-19) photomultiplier. The error was less than 3 %. Resonances were observed at proton energies of 1495, 1624, 1670, 2015, 2410, 2920, 3140, 3669, and 4022 kev. These correspond to the Al^{25} levels with the excitation energies of 3.725, 3.850, 3.893, 4.224, 4.604, 5.093, 5.304, 5.812, and 6.151 Mev. According to the single-level approximation of dispersion theory, the broad resonance at E_p = 3140 kev is due to proton capture in a state with l = 0. The corresponding Al^{25} level (excitation

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energy 5.304 Mev) is a $1/2^+$ level. The spin and parity of the 5.812-Mev level are $3/2^+$ or $5/2^+$, those of the 6.151-Mev level are $3/2^+$. The protons are captured onto this level in a state with l = 2. The characteristics of the remaining Al^{25} levels with excitation energies of less than 5 Mev agree with the results of earlier papers. There are 2 figures and 2 tables. The most important English-language references are: P. M. Endt, C. M. Braams. Rev. Mod. Phys., 29, 683, 1957; A. E. Litherland et al. Can. J. Phys., 36, 378, 1958; H. W. Lewis, W. T. Joyner. Bull. Am. Phys. Soc. Ser., 11, 280, 1956.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet (Khar'kov State University); Fiziko-tekhnicheskiy institut Akademii nauk USSR (Physicotechnical Institute of the Academy of Sciences UkrSSR)

SUBMITTED: July 10, 1962

S/056/63/044/002/013/065
B102/B186

AUTHORS: Val'ter, A. K., Skakun, N. A., Klyucharev, A. P., Strashinskiy, A. G.

TITLE: Polarization of the protons in the $He^3(d,p)He^4$ reaction

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44, no. 2, 1963, 475-477

TEXT: A cylinder 30 mm in length filled with He^3 gas was bombarded by deuterons of ~ 2 Mev obtained from an electrostatic accelerator. The proton polarization was measured with a helium polarimeter. In order to eliminate systematic errors, the analyzer was rotated through an angle of 180° during the measurements. At the well-known resonance E_d = 450 kev (excitation of the Li^5 $3/2^+$ level) the protons emitted are unpolarized, and this resonance can be used to determine the corrections for the analyzer geometry. The polarizations were calculated from the left-right asymmetry $R = (1+P_1P_a)/(1-P_1P_a)$; P_1 is the proton polarization, taken as positive in the direction of the normal of the scattering plane, and P_a

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Polarization of the protons ...

is determined from the polarimeter geometry and the p-He^4 elastic scattering phase. There are 1 figure and 1 table.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk USSR
(Physicotechnical Institute of the Academy of Sciences UkrSSR)

SUBMITTED: September 4, 1962

E_d, Mev	P_{He}, atm	$\theta_{l.s.}$	P_a, %	P_1, %
0,77	2,0	90	65	0 ± 2,0
1,88	1,6	35	67	2,7 ± 2,0
1,87	2,0	44	67	5,4 ± 3,2
1,86	1,8	60	67	7,6 ± 3,6
1,91	1,8	75	67	5,8 ± 3,5
1,88	2,0	90	67	4,1 ± 3,4

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S/056/63/044/003/050/053
L 17633-63 EWT(l)/EWP(q)/EWT(m)/BDS/ES(w)-2 AFFTC/ASD/IJP(C)/SSD
Pab-4 GG/JD

AUTHOR: Alikhanyan, A. I., Garibyan, G. M., Lorikyan, M. P., Val'ter, A. K., Grishayev, I. A., Petrenko, V. A., and Fursov, G. L.

TITLE: Ionization energy losses of fast electrons in thin films

PERIODICAL: Zhurnal eksperimental'noy i tekhnicheskoy fiziki, v. 44, no. 3, 1963, 1122-1124

TEXT: G. M. Garibyan (Ref. 1: ZhETF, 37, 527, 1959) showed that whenever a charged particle passes through a sufficiently thin film, its electric field is the same as in the vacuum. Consequently, within such a layer the particle produces ionization as if there is no screening effect due to the medium, i.e., the density effect is not present. The measurements were carried out on the linear accelerator of the Fiziko-tekhnicheskiy institut Akademii nauk SSSR (Physico-Technical Institute of the AN USSR) using a battery of thin films to obtain the total losses with a sufficient accuracy and minimum fluctuations. The results are shown on Fig. 2. The results for a very thin film agree with the theoretical curve derived in Ref. 3 (R. M. Sternheimer, Phys. Rev., 103, 511, 1956). There are 2 figures.

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S/056/63/044/003/050/053

L 17633-63

Ionization energy losses...

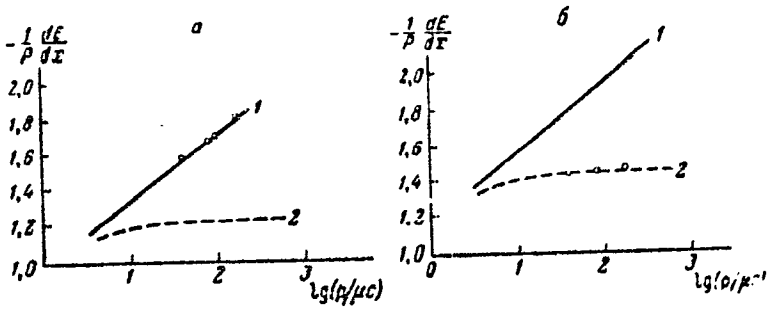

Fig. 2. Theoretical curves and experimental values for losses of energy in polystyrene (a) 10^{-6} cm thick and (δ) $2 \cdot 10^{-3}$ cm thick. 1 - Theoretical curve neglecting density effects; 2 - theoretical curve taking care of the density [polarization] effects. Circles denote experimental results. The ordinate represents the specific transmission in relative units. [Curves are normalized at the 40 Mev electron energy points and the standard experimental error is 1%.]

SUBMITTED: January 7, 1963

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S/056/63/044/004/002/044
B102/B186

AUTHORS: Klyucharev, V. A., Val'ter, A. K., Zalyubovskiy, I. I., Afanas'yev, V. D.

TITLE: Measurement of the gyromagnetic ratio of the W^{182} nucleus in the first excited state

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44, no. 4, 1963, 1136 - 1140

TEXT: The authors developed an apparatus suitable for measuring the gyromagnetic ratio of excited nuclei according to the method of Coulomb excitation as well as to the method of $\gamma\gamma$-correlation. Its main parts are a two-channel goniometer, an electronic recorder, and an electromagnet generating fields of up to 35000 gauss. The γ-detector consists of a NaI(Tl) crystal with an ФЭУ-42 (FEU-42) photomultiplier; its pulses are fed to a fast-slow coincidence circuit. The gyromagnetic ratio of the first excited state (100 kev) of the even-even W^{182} nucleus was measured by the $\gamma\gamma$-correlation method. Neutron-irradiated natural metallic tantalum was used as a gamma source. The gyromagnetic ratio was determined from the perturbation of the $\gamma\gamma$-correlation of the 229 - 100 kev cascade caused by the magnetic

field (35 kgauss). The shift of the correlation function $W(\Theta)$ was $\Delta\Theta = 4^{\circ}10'$ which corresponds to a gyromagnetic ratio $g = 0.247 \pm 0.037$. In the case of a liquid source, $\Delta\Theta$ was $5^{\circ}35'$ corresponding to $g = 0.323 \pm 0.048$. The mean value for both measurements is $g = 0.285 \pm 0.042$. The anisotropy factors of the unperturbed correlation functions were $A_2 = 0.087 \pm 0.008$ and $A_2 = 0.108 \pm 0.008$ for a solid and liquid source, respectively. There are 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk Ukrainskoy SSR (Physicotechnical Institute of the Academy of Sciences Ukrainskaya SSR); Khar'kovskiy gosudarstvennyy universitet (Khar'kov State University)

SUBMITTED: August 31, 1962

ACCESSION NR: AP3003095 S/0056/63/044/006/1765/1769 6C

AUTHOR: Val'ter, A. K.; Klyucharev, A. P.; Nemets, O. F.; Tokarevskiy, V. V.

TITLE: Elastic scattering of deuterons by chromium and zinc isotopes

SOURCE: Zhurnal eksper. i teor. fiziki, v. 44, no. 6, 1963, 1765-1769

TOPIC TAGS: elastic deuteron scattering, chromium isotope, zinc isotope, angular distribution, optical model, compound nucleus model

ABSTRACT: The angular distributions of 13.6-MeV deuterons elastically scattered by Cr sup 50, 52, 53, 54, and Zn sup 64, 68, 70 isotopes are measured at angles from 2.5 to 150° with the aim of studying isotopic effects for elastic scattering of deuterons, similar to studies already made for protons. The curves obtained for the ratio of the experimentally measured cross sections to the cross sections for Coulomb scattering have a diffraction nature. As the number of neutron increases, the maxima shift toward the smaller angles and the cross section begins to decrease at a higher rate with increasing angle. Comparison is made with data obtained by others. "In conclusion, the authors take this opportunity to express their gratitude to V. N. Medyanik, L. G. Lishenko, and A. D. Nikolaychuk for preparing the isotope targets, and to the cyclotron crew for uninterrupted operation of the cyclotron."

Card 1/2

Association: Inst. of Physics, Academy of Sciences, UkrSSR

VAL'TER, A. K.; KLYUCHAREV, V. A.; AFANAS'YEV, B. D.

"Experimental Methods of Measurement of Gyromagnetic Ratios of Excited Nuclei."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22 Feb 64.

KhFTI (Ukrainian Physico Technical Inst, Khar'kov)

VAL'TER, A. K.; KOPANETS, Ye. G.; L'VOV, A. N.; TSYTKO, S. P.

"Radiative Capture and Inelastic Scattering of Protons by Nuclei of Mg^{26}."

"Excited States of the Nucleus Al^{27}."

reports submitted for all-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22 Feb 64.

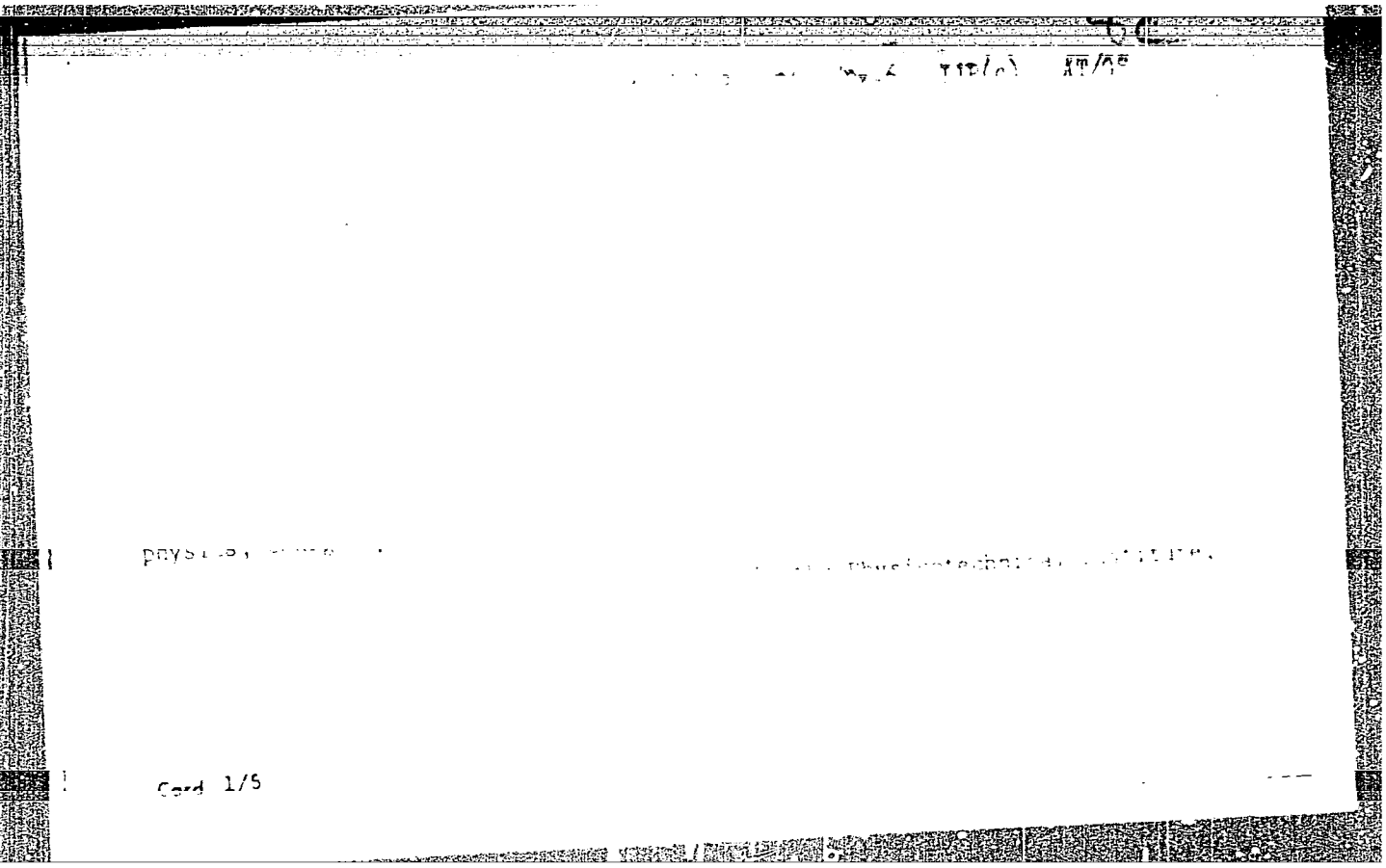
KhFTI (Ukrainian Physico Technical Inst, Khar'kov)

VAL'TER, A. K.; KOPANETS, Ye. G.; L'VOV, A. N.; TSYTKO, S. P.

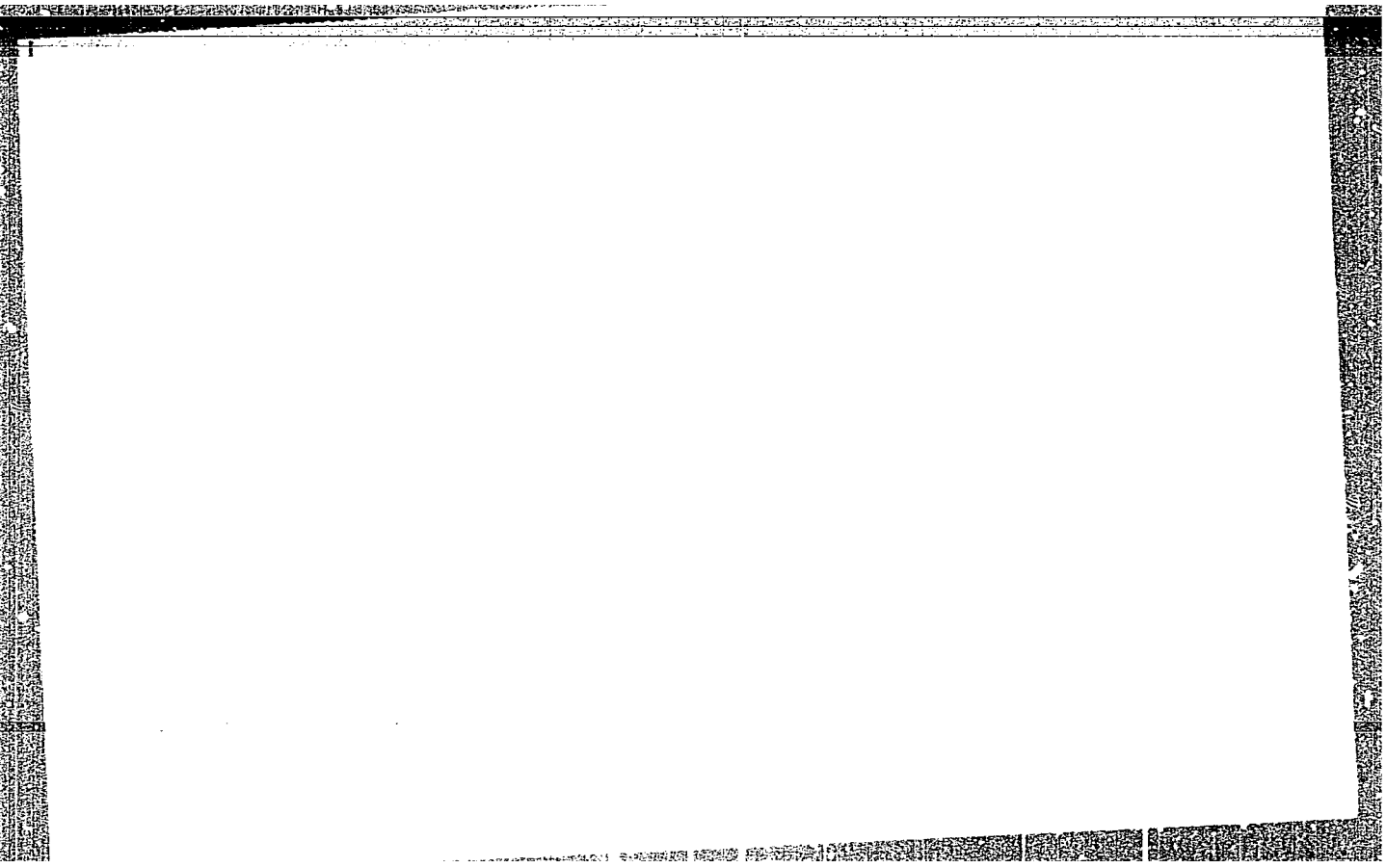
"Inelastic Scattering of Protons by Nuclei Ar^{36}."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22 Feb 64.

KhFTI (Ukrainian Physico Technical Inst, Khar'kov)



Card 1/5



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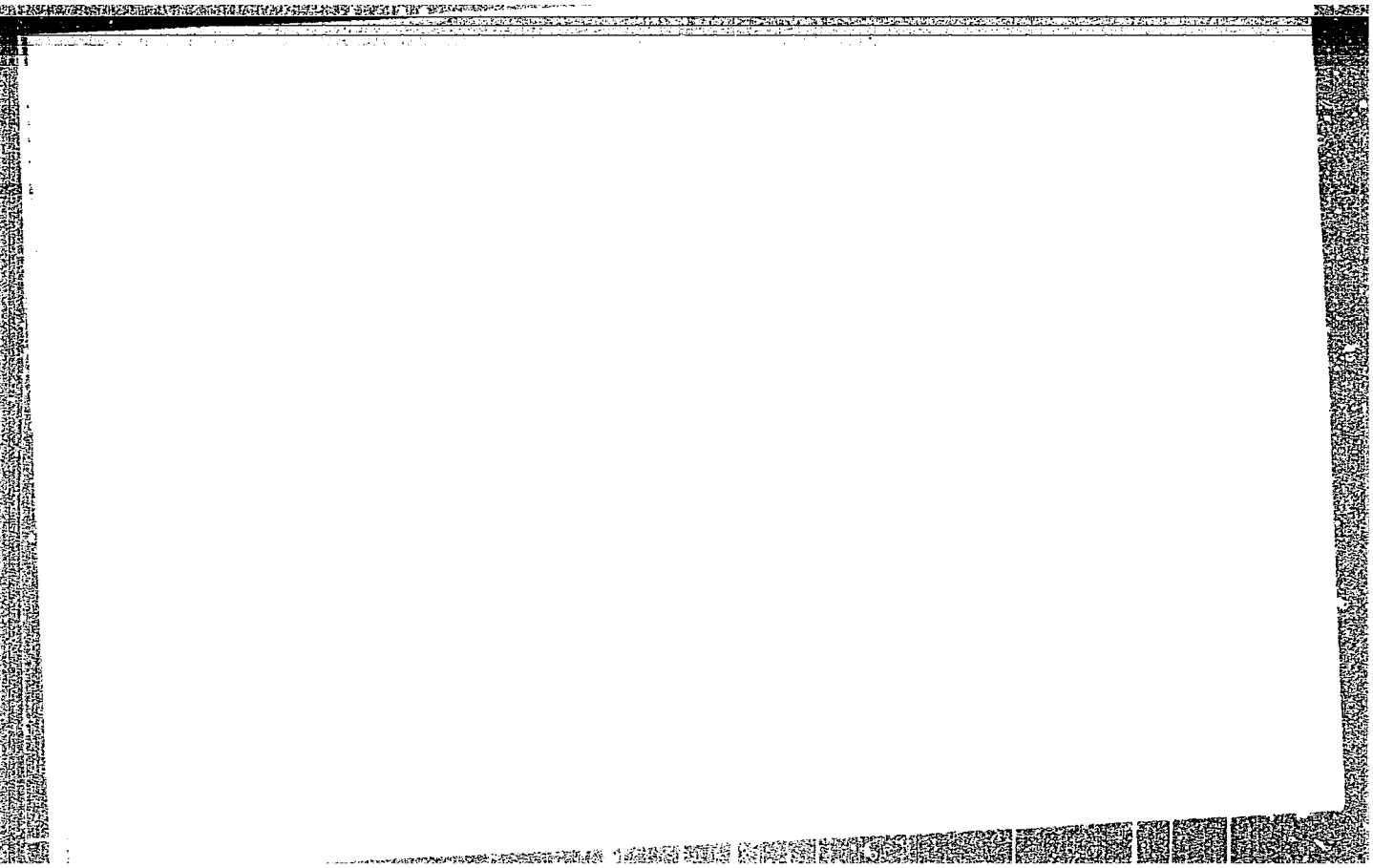

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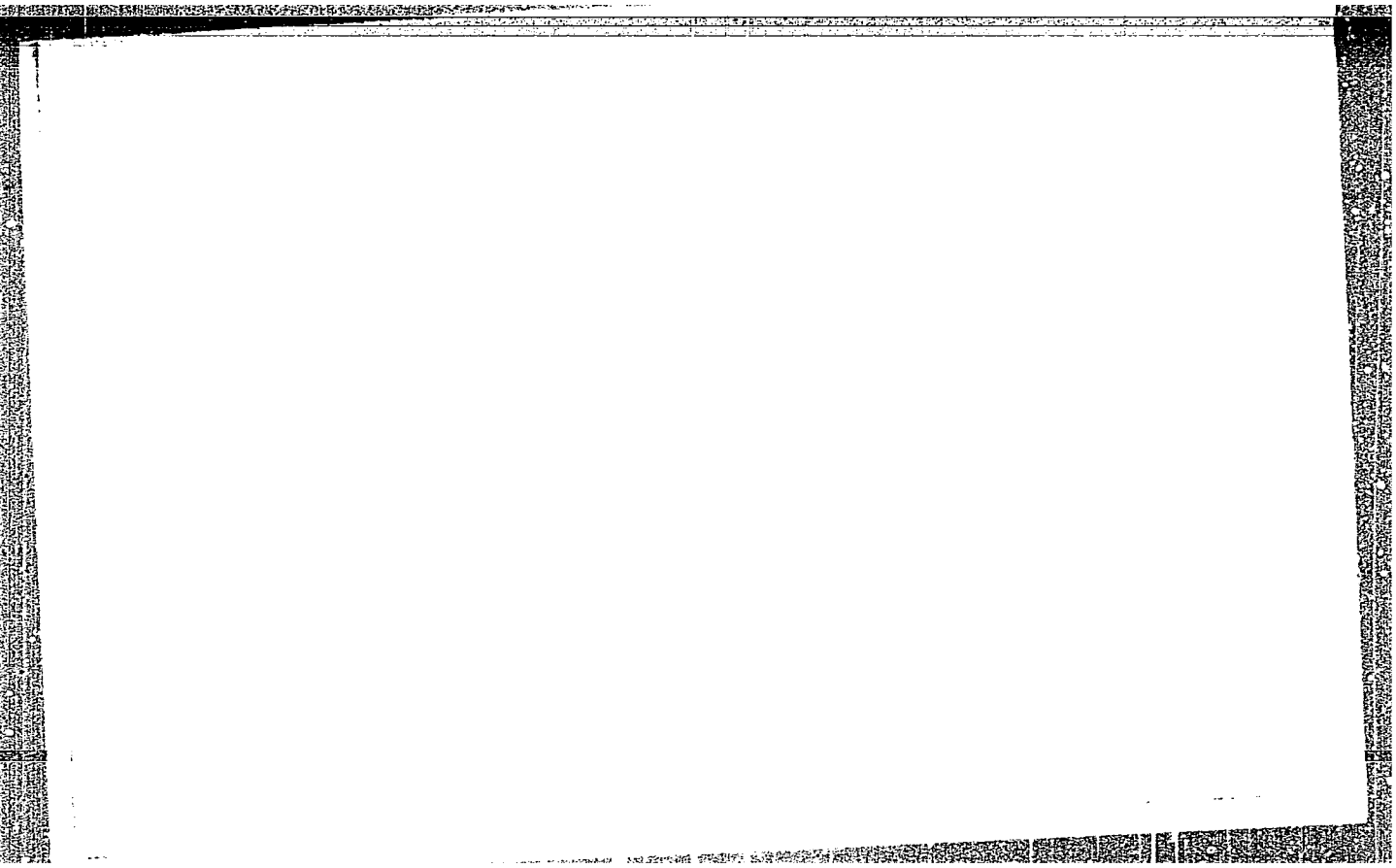

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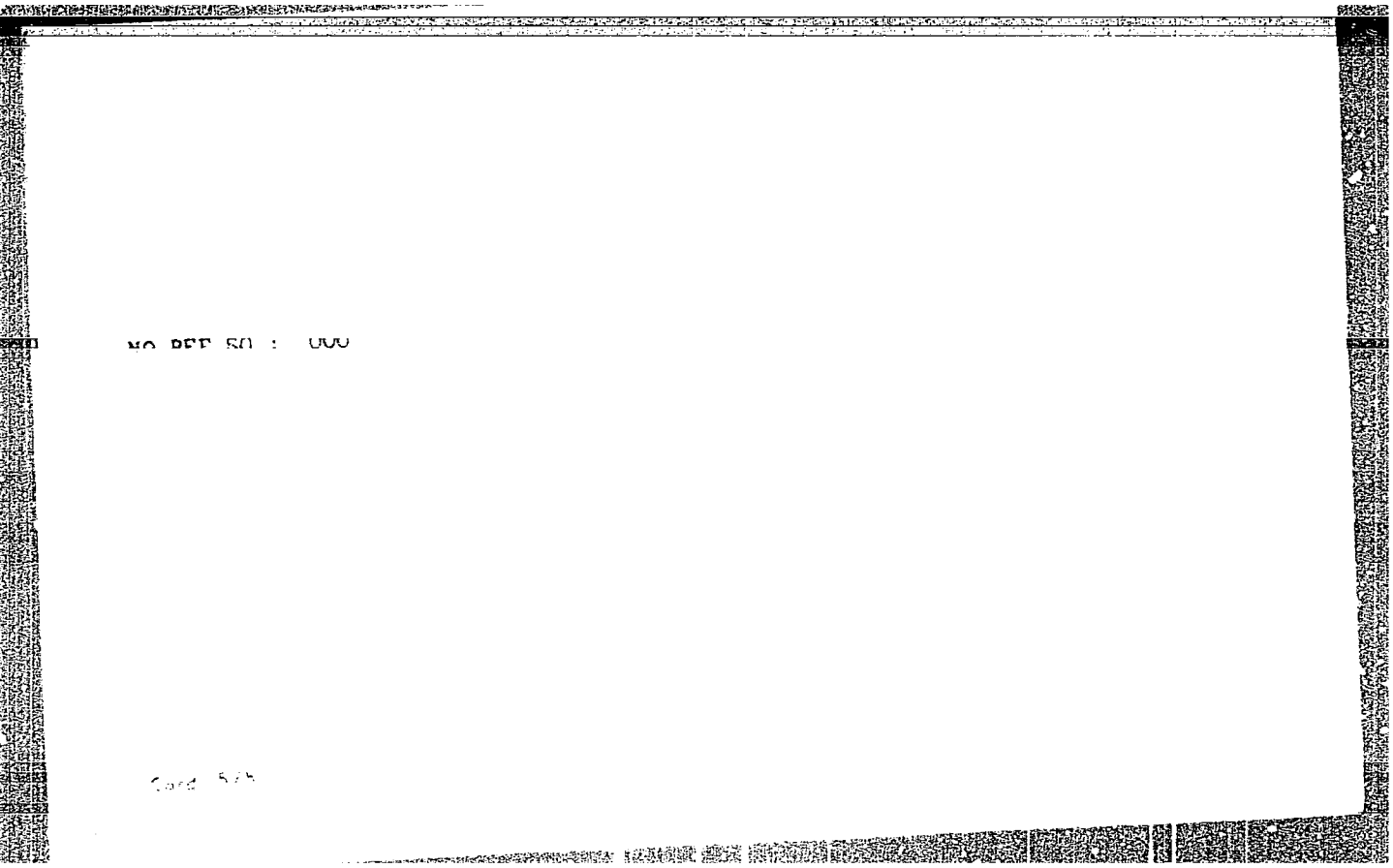

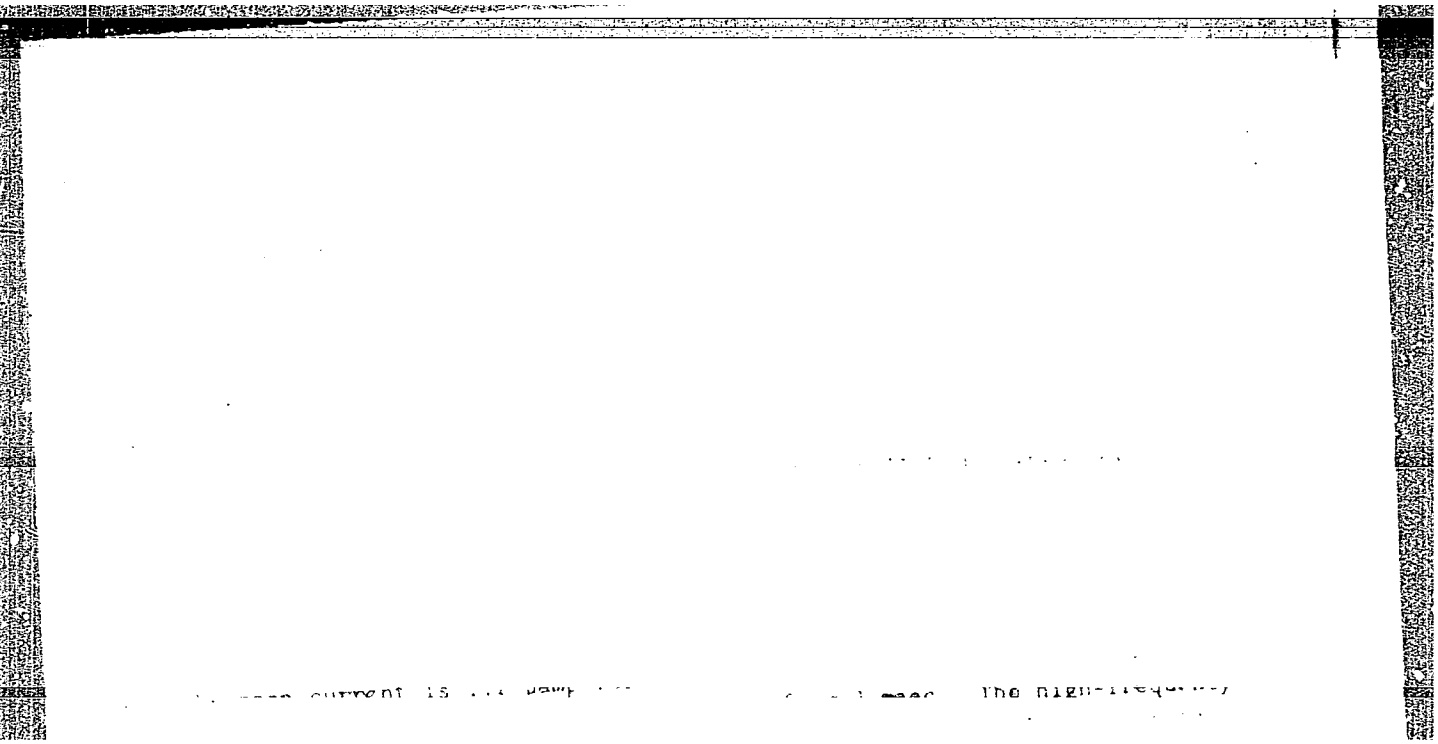

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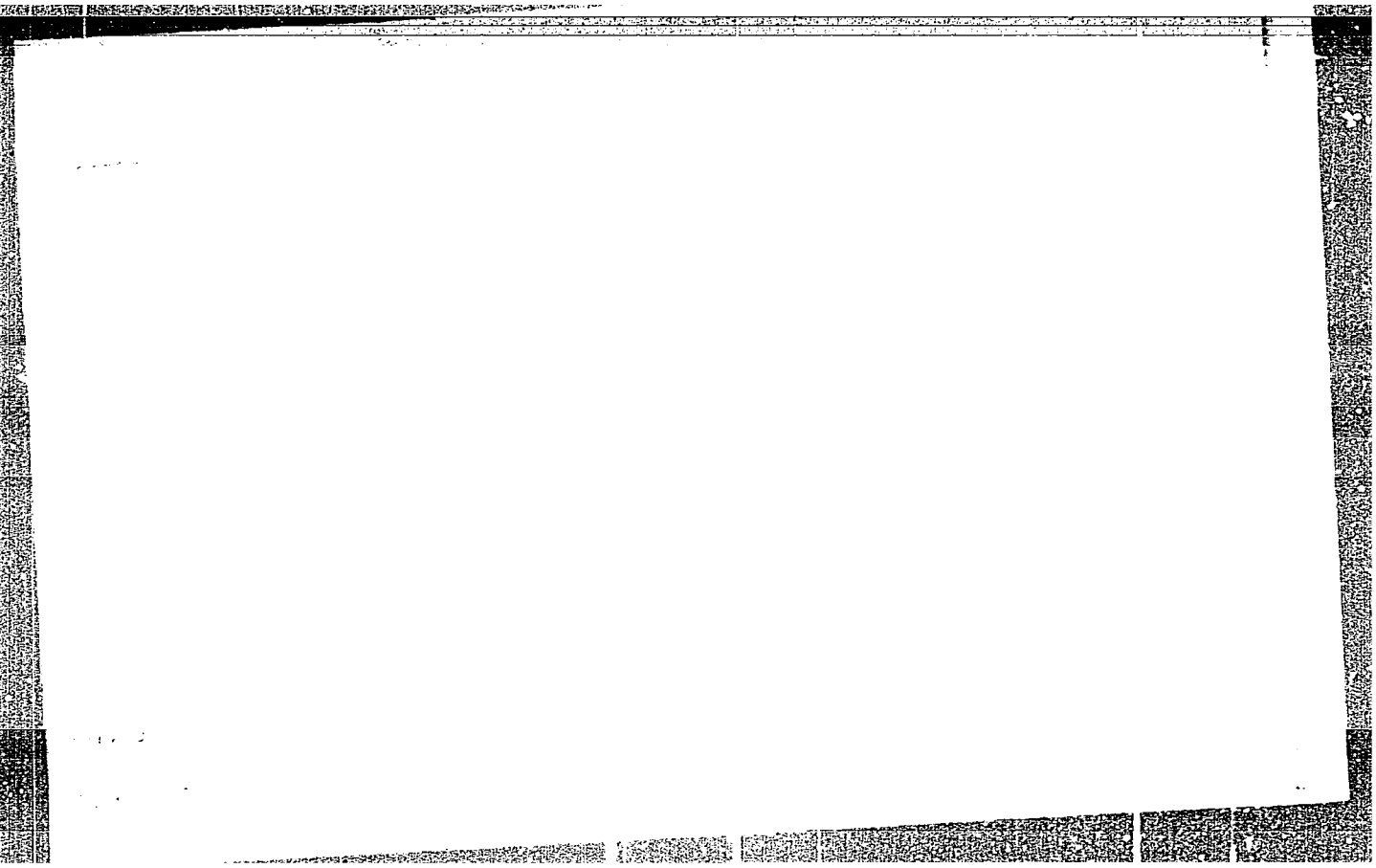

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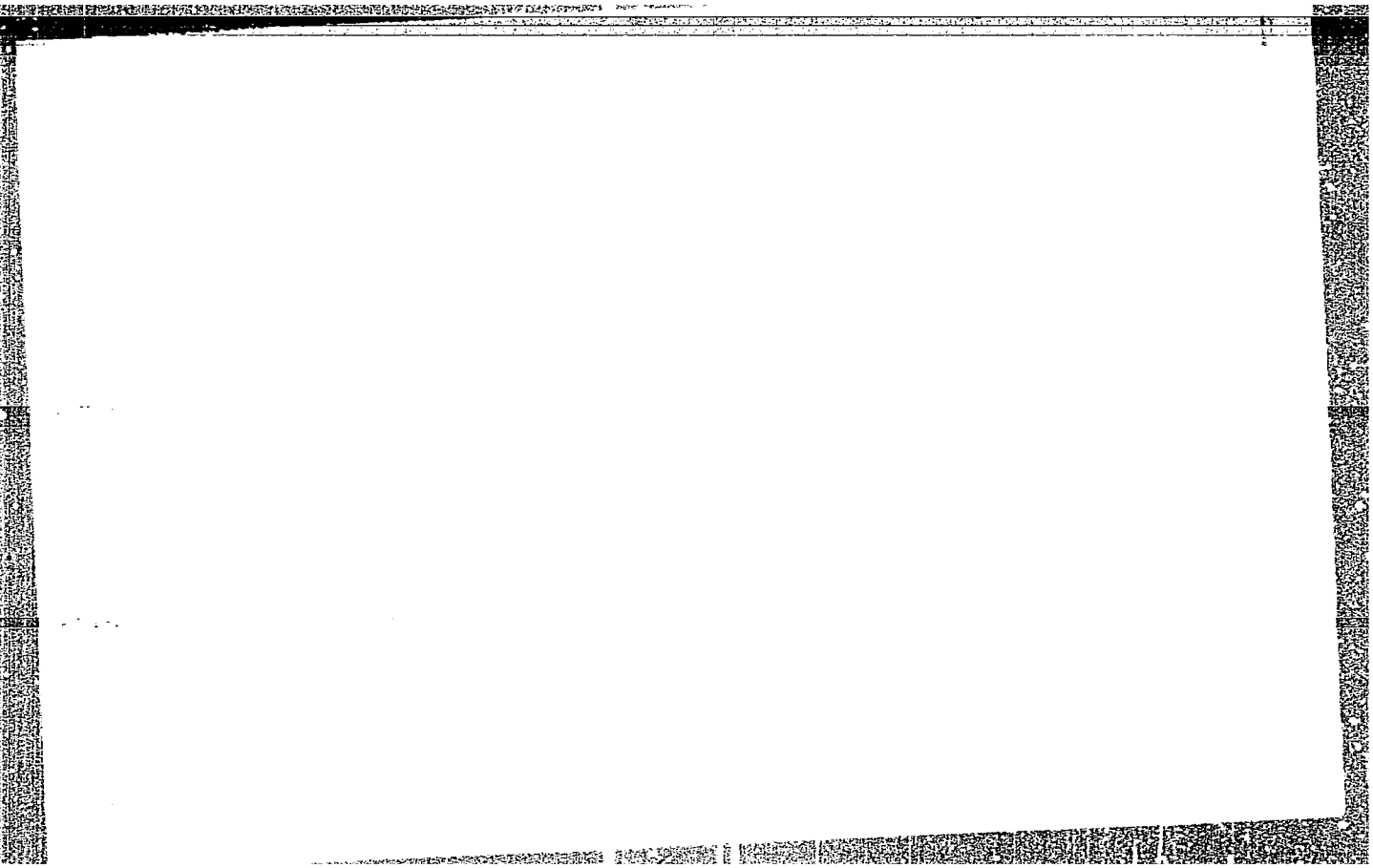

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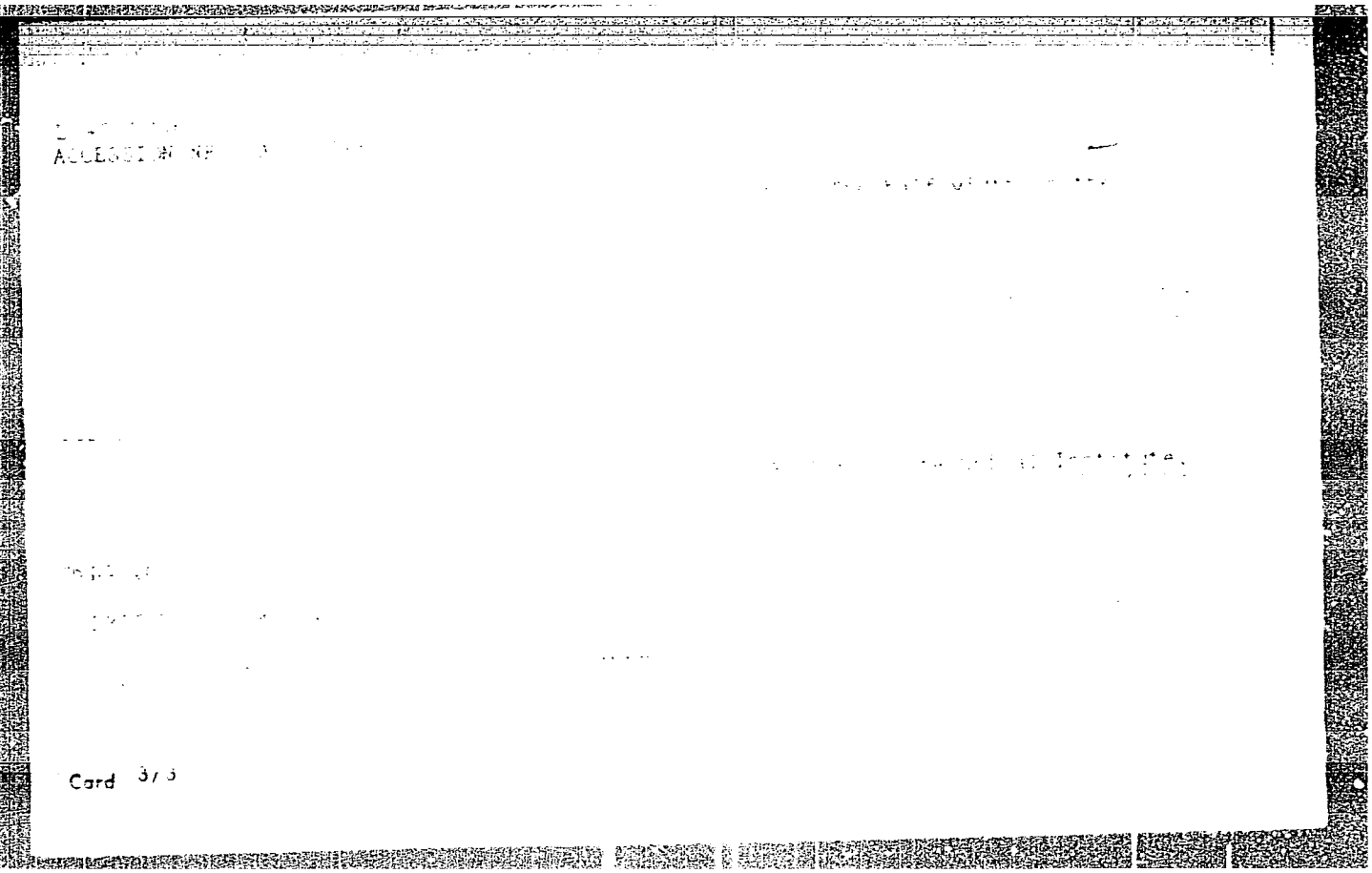

Card 3/3

ACCESSION NR: AP4024050 S/0048/64/028/002/0271/0274

AUTHOR: Val'ter, A.K.; Kopanets, Ye.G.; L'vov, A.N.; Tsy*tko, S.P.

TITLE: Radiative proton capture by Mg^{26} at proton energies from 2.0 to 2.3 MeV /Report, Fourteenth Annual Conference on Nuclear Spectroscopy held in Tbilisi 14 to 22 Feb 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.2, 1964, 271-274

TOPIC TAGS: radiative proton capture, decay scheme, Al^{27} decay, Al^{27} levels, Al^{27}, Mg^{26}

ABSTRACT: Radiative proton capture by Mg^{26} at proton energies below 2 MeV was investigated earlier by the authors (Izv.AN SSSR.Ser.fiz.27,No.10,1963; Ibid.27,No.11, 1963) and by P.M.Endt and C.Van der Leun (Nucl.Phys.34,No.1,1962). As a result of these studies there was obtained information on the levels in Al^{27} in the excitation energy range from 8.0 to 10.2 MeV. The only information available on the levels in the 10.2 to 11.5 MeV range was obtained from a study of elastic scattering of protons by Mg^{26} (A.I.Popov, P.V.Sorokin, V.E.Storizhko and A.Ya.Taranov,Izv.AN SSSR, Ser.fiz.26,1074,1961). Hence in the present work there were investigated the γ-rays

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ACCESSION NR: AP4024050

from the $Mg^{26}(p,\gamma)Al^{27}$ reaction at proton energies from 2.0 to 2.3 MeV in order to obtain information on the characteristics of the levels in Al^{27} in the 10.2 to 10.5 MeV excitation energy range. The source of protons for the experiments was the electrostatic generator of the Physico-technical Institute (Academy of Sciences USSR) (A.K.Val'ter and A.A.Tsygikalo, Pribory i tekhnik eksperim.4,3,1957). The isotopic Mg^{26} target was prepared in an electromagnetic separator by the method of knocking Mg^{26} ions into a tantalum backing. For measuring the excitation function the γ-ray detector was an NaI(Tl) crystal coupled to an FEU-42 photomultiplier. The γ-ray spectrum was investigated by means of the scintillation spectrometer described by Yu.P.Antuf'yev et al (Izv.AN SSSR,Ser.fiz.25,261,1961). The excitation function recorded for the reaction is shown in Fig.1 of the Enclosure. The fifteen observed resonances are characterized in a table; another table gives the results of analyses of the γ-spectrum for six of the resonances. The decay scheme for the six investigated resonance levels is shown in Fig.2 of the Enclosure. The spin assignments arrived at for some of the levels are given in this figure. "The authors express their gratitude to M.I.Gusev for preparing the Mg^{26} targets and to Yu.A.Kharchenko and the personnel servicing the electrostatic accelerator." Orig.art.has: 3 figures and 2 tables.

Card 2/3

ACCESSION NR: AP4024050

ASSOCIATION: none

SUBMITTED: 14Oct63 DATE ACQ: 08Apr64 ENCL: 02

SUB CODE: NS NR REF SOV: 007 OTHER: 002

Card 3/5

VAL'TER, A.K.; KOPANETS, Ye.G.; L'VOV, A.N.; TSYTKO, S.P.

Inelastic scattering of protons by Ar^{36} nuclei. Izv. AN SSSR. Ser. fiz. 28 no.7:1137-1139 Jl '64 (MIRA 17:8)

Radiative capture and inelastic scattering of protons by Mg^{26} nuclei. Ibid.:1140-1144

1. Fiziko-tekhnicheskiy institut AN UkrSSR.

ACCESSION NR: AP4031140 S/0056/64/0046/004/1212/1215

AUTHORS: Alikhanyan, A. I.; Val'ter, A. K.; Garibyan, G. M.; Grishayev, I. A.; Lorikyan, M. P.; Petrenko, V. V.; Fursov, G. D.

TITLE: Ionization energy losses of fast electrons in thin polystyrene layers

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 4, 1964, 1212-1215

TOPIC TAGS: polystyrene, ionization loss, electron bombardment, polarization

ABSTRACT: The dependence of the electron ionization energy loss on the electron momentum was investigated experimentally as a continuation of earlier work (ZhETF v. 44, 1122, 1963) with polystyrene films of different thickness. In the present work the polystyrene film thicknesses were 10^{-5}, 2×10^{-5}, and 2×10^{-4}. The measurement procedure is described. On the basis of these and the earlier mea-

Card 1/3

ACCESSION NR: AP4031140

surements it is concluded that in the 20--86 MeV range the electron ionization energy losses in polystyrene films of thicknesses equal to or less than the critical value are in good agreement with the theoretical prediction of G. M. Garibyan (ZhETF v. 37, 527, 1959). At thicknesses greater than critical, the influence of the polarization begins to be felt and increases with thickness. "The authors are grateful to Professor V. M. Kharitonov and V. I. Startsev for help with the work, and to the accelerator crew."

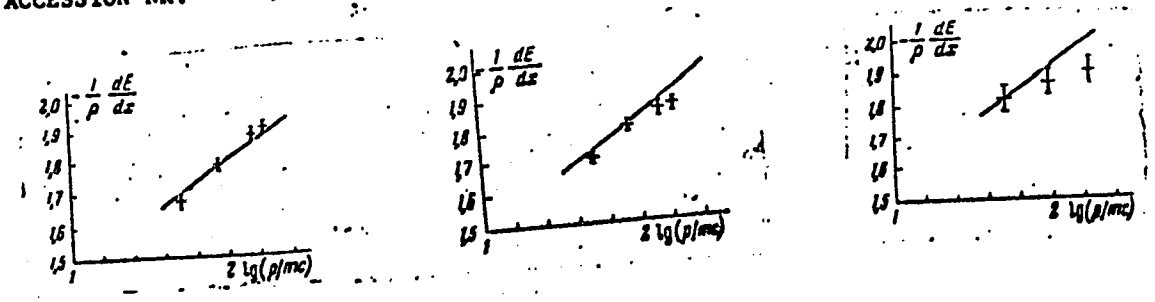
ASSOCIATION: Fizicheskiy institut GKAE, Yerevan (Physics Institute GKAE). Fiziko-tekhnicheskiy institut AN UkrSSR (Physicotechnical Institute AN UkrSSR)

SUBMITTED: 190ct63 DATE ACQ: 07May64 ENCL: 01

SUB CODE: GP, NP NR REF SOV: 003 OTHER: 001

ACCESSION NR: AP4031140

ENCLOSURE: 01



Theoretical curves and experimental values (+) of electron energy loss in a polystyrene film (film thickness, left to right: 10^{-5}, 2×10^{-5}, and 2×10^{-4} cm)

3/3

KOTOV, V.I., kand.fiz.-matem.nauk (Dubna); VEKSLER, V.I., akademik; VLADIMIRSKIY, V.V.; SETVAK, M., doktor (Chekhoslovakiya); MINTS, A.L., akademik; DZHELEPOV, V.P., prof.; VAL'TER, A.K., prof.; KOLOMENSKIY, A.A., prof.

Accelerators of the future; articles and speeches of the participants in the international conference in Dubno. Priroda 53 no.1:44-56 '64. (MIRA 17:2)

1. Chlen-korrespondent AN SSSR (for Vladimirskiy).

L 21134-66 EWT(m) DIAAP

ACC NR: AP6011988 SOURCE CODE: UR/0048/65/029/005/0800/0802

AUTHOR: Val'ter, A. K.; Kopanets, Ye. G.; Tsytko, S. P.

ORG: Physicotechnical Institute, AN UkrSSR (Fiziko-tekhnicheskiy institut AN UkrSSR)

TITLE: Measurement of linear polarization of 1.97-MeV gamma rays in the reaction Ar sup 36 (p,p' gamma)Ar sup 36 [The paper was presented at the 15th Annual Conference on Nuclear Spectroscopy and Atomic Nuclear Structure held in Minsk from 25 January to 2 February 1965]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 5, 1965, 800-802

TOPIC TAGS: gamma ray, argon, chlorine, potassium, radioisotope, even even nucleus

ABSTRACT: The first level of the Ar^{36} nucleus with energy of 1.97 MeV was observed in reactions Cl^{35}(p gamma) Ar^{36} and K^{39}(p gamma) Ar^{36}. The spin and parity of this level were not found experimentally, although it was assumed that by analogy with other even-even nuclei it was most probably that I sup pi = 2+. As a consequence of this assumption the gamma-transition from the first level to the ground state should be pure E2-radiation. This has been confirmed by the authors experimentally. This article describes the experiment and gives calculations, results, and conclusions. The authors thank M. I. Gusevaya for preparing the target isotopes Ar^{36}, and also I. P. Kolodyazhnyy for assistance during the carrying-out of the measurements. Orig. art. has: 3 figures. [JPRS]

SUB CODE: 20, 18, 07 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 006

Card 1/1

L 21135-66 EWT(m) DIAAP

ACC NR: AP6011989 SOURCE CODE: UR/0048/65/029/005/0803/0807

AUTHOR: Val'ter, A. K.; Kopanets, Ye. G.; Tsytko, S. P.

ORG: Physicotechnical Institute, AN UkrSSR (Fiziko-tekhnicheskiy institut AN UkrSSR)

TITLE: Al sup 27 nucleus energy levels with excitation energies of 10.495 and 3.95 MeV [The paper was presented at the 15th Annual Conference on Nuclear Spectroscopy and Atomic Nuclear Structure held in Minsk from 25 January to 2 February 1965]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 5, 1965, 803-807

TOPIC TAGS: aluminum, gamma radiation, magnesium, excited nucleus

ABSTRACT: This work describes the study of the gamma-radiation due to reaction Mg sup 26 (p gamma) Al sup 27 at E sub p = 2298 keV. The experiments and apparatus are described elsewhere. The authors thank M. I. Gusevaya for preparing the Mg sup 26 target isotopes and also I. P. Kolodyazhnyy for assistance during the carrying-out of the measurements. Orig. art. has: 4 figures and 1 table. [JPRS]

SUB CODE: 20 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 008

Card 1/1 UDC

VAL'TER, A.P.

66347

SOV/81-59-19-66953

24.6600

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 19, p 4 (USSR)

AUTHORS: Val'ter, A.P., Klyucharev, A.P., Krivets, G.Ye., Samsonov, V.M.

TITLE: The Cross-Sections of the Reactions $Be^9(He^3, p)B^{11*}$ at an Energy of 1.5 Mev

PERIODICAL: Uch. zap. Khar'kovsk. un-t, 1958, Vol 98, Tr. fiz. otd. fiz.-matem. fak., Vol 7, pp 159 - 161

ABSTRACT: For determining the cross sections of the reactions $Be^9(He^3,p)B^{11*}$ corresponding to B^{11} nucleus excitation energies of 7.3, 5.0 and 4.4 Mev, a thin beryllium target was irradiated by He^3 ions accelerated by means of an electrostatic generator to an energy of 1.5 Mev. The charged particles escaping at an angle of 120° were recorded by photo-plates with an emulsion of 200 μ thickness. The quantity of He^3 ions was determined by the current in the target measured by an integrator. Based on the obtained values of the differential cross sections at an angle of 120° and the angular distributions of the three groups of protons, corresponding to the

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4

66347
SOV/81-59-19-66953

The Cross-Sections of the Reactions $Be^{9}(He^{3},p)B^{11*}$ at an Energy of 1.5 Mev

levels of the nucleus with energies of 7.3, 5.0 and 4.4 Mev, the total cross sections for these three groups were calculated. The following values were obtained (in mbarn) 1.4 ± 0.7; 0.5 ± 0.25 and 1.0 ± 0.5, respectively. The error in the determination of the relative values of the cross-sections does not exceed 10%.

V. Man'ko

Card 2/2

VAL'TER, A.V.

Coronary arteriosclerosis from a medicolegal point of view. (MIRA 14:2)
Trudy LSGNI 48:207-226 '59.
(CORONARY HEART DISEASE)

32774
S/135/62/000/001/004/007
A004/A101

1.2310 1573

AUTHORS: Shternin, L.A., Komarcheva, E.S., Val'ter, I.G., Engineers

TITLE: Friction welding in the manufacture of turbo-compressors

PERIODICAL: Svarochnoye proizvodstvo, no. 1, 1962, 14 - 16

TEXT: The authors analyze the results of technological investigations of the friction welding of austenitic ЭИ 572 (EI572) steel to pearlitic steels of the 0XM (0KhM) and 40 X (40Kh) grades. They describe the welding conditions and heat treatment and present the results of mechanical testing of the welding joints. The investigations to study the possibility of using friction welding in the manufacture of turbo-compressor runners were carried out by VNIIESO and TsNIDI. The 40Kh grade steel was subjected to preliminary heat treatment - oil-hardening at 840°C, tempering at 550°C (with subsequent water cooling) - while the 0KhM steel was welded as delivered. The austenitic steel blanks were produced by investment pattern casting and subjected to the following heat treatment: austenizing 1,160 - 1,180°C with water quenching, dispersion hardening at 750°C with 15 hours holding and air-cooling. Specimens 16, 20 and 28 mm in diameter were welded. The chemical and mechanical properties of the steels are shown in

Card 1/3

Friction welding ...

a number of tables. The major part of the welding operation was carried out on the MCT -31 (MST-31) machine, developing an axial stress of up to 14,000 kg, while the relative rotation speed of the blanks being welded amounted to 1,000 rpm. The authors give a description of the welding conditions and point out that an analysis of the results obtained at different welding conditions shewed that the notch toughness of the welding joint was stable only under the condition of using a specific peening force equal to 21 kg/mm^2. In this case, the specific heating stress amounted to 6 kg/mm^2. A batch of specimens friction-welded under these conditions, was subjected to mechanical tests the results of which are shown in a table. Moreover, fatigue strength tests of the welded specimens with alternating loads were carried out on the BY -8 (VU-8) machine at the Leningradskiy politekhnicheskiy Institut im. Kalinina (Leningrad Polytechnic Institute im. Kalinin). In the tensile and endurance tests all welding joints were destroyed along the EI572 steel base metal. The authors present a number of microsections, showing the microstructure of the welded specimens after etching. The analysis of the mechanical and metallographic investigations reveals that the friction welding of austenitic steel to pearlitic steel yields a dependable joint with a sufficiently high strength, exceeding in some cases the indices of welded austeni-

Card 2/3

32774

S/135/62/000/001/004/007
A004/A101

Friction welding ...

tic steels. The equipment existing and being under construction at present for friction welding makes it possible to weld turbo-compressor runners with shafts up to 50 mm in diameter. There are 6 figures and 5 tables.

ASSOCIATIONS: VNIIESO (Shternin, L.S., Komarchava, E.S.); TsNIDI (Val'ter, I.G.)

Card 3/3

L 36056-66 EWT(m)/EWP(v)/T/EWP(t)/ETI/EWP(k) IJP(c) WW/JD

ACC NR: AP6014156 (N,A) SOURCE CODE: UR/0114/65/000/012/0026/0029

41
40
B

AUTHOR: Val'ter, I. G. (Engineer); Komarcheva, E. S. (Engineer)

ORG: none

TITLE: Friction welding of high-alloy steels used in diesel supercharger elements

SOURCE: Energomashinostroyeniye, no. 12, 1965, 26-29

TOPIC TAGS: austenitic steel, pearlitic steel, low alloy steel, friction welding, supercharger, welding technology/EI696ML austenitic steel, EI787L austenitic steel, EI893L austenitic steel, 40G pearlitic steel, 40Kh pearlitic steel

ABSTRACT: One of the requirements which must be met by the austenitic high-alloy steels used as the material of supercharger elements (rotors) is the possibility of welding them to the low-alloy pearlitic steels of which the rotor shafts are manufactured; this makes for special problems considering that the arc and resistance welding techniques are inadequate for such cases. In this connection, the authors point to the advantages of employing friction welding, as based on experimental findings for the welding of the following combinations of austenitic and pearlitic steels: 1) EI696ML + 40G; 2) EI696ML + 40Kh; 3) EI787L + 40G; 4) EI787L + + 40Kh; 5) EI893L + 40G, for which the following conditions are established as optimal: heat-generating pressure P_h = 6 kg/mm^2; contact pressure P_c = 21 kg/mm^2;

UDC: 621.791.669.15-194:621.436

Card 1/2

L 35056-66

ACC NR: AP6014156

heating time t_h = 12 sec^{-1}; total upset $\Sigma\sigma$ = 3-3.5 mm; relative rotational speed n = 1000 RPM. This regime assures stable, high-quality joints, as verified by tests of impact strength, tensile strength and static bending as well as by metallographic examinations. Moreover, the employment of friction welding markedly reduces the time required to prepare the rotor and the shaft for welding, as well as the welding time itself, and it also reduces power consumption and dispenses with the need for expensive austenitic electrodes. Orig. art. has: 3 tables and 4 figures.

SUB CODE: 13,11/ SUBM DATE: none/ ORIG REF: 010

Joining of Dissimilar Metals

Card 2/2 vmb

MARKUS, S.A.; VAL'TER, I.Ya.

Letters to the editors. Shakht.stroi. 9 no.5:26-27 My '65.
(MIRA 18:6)

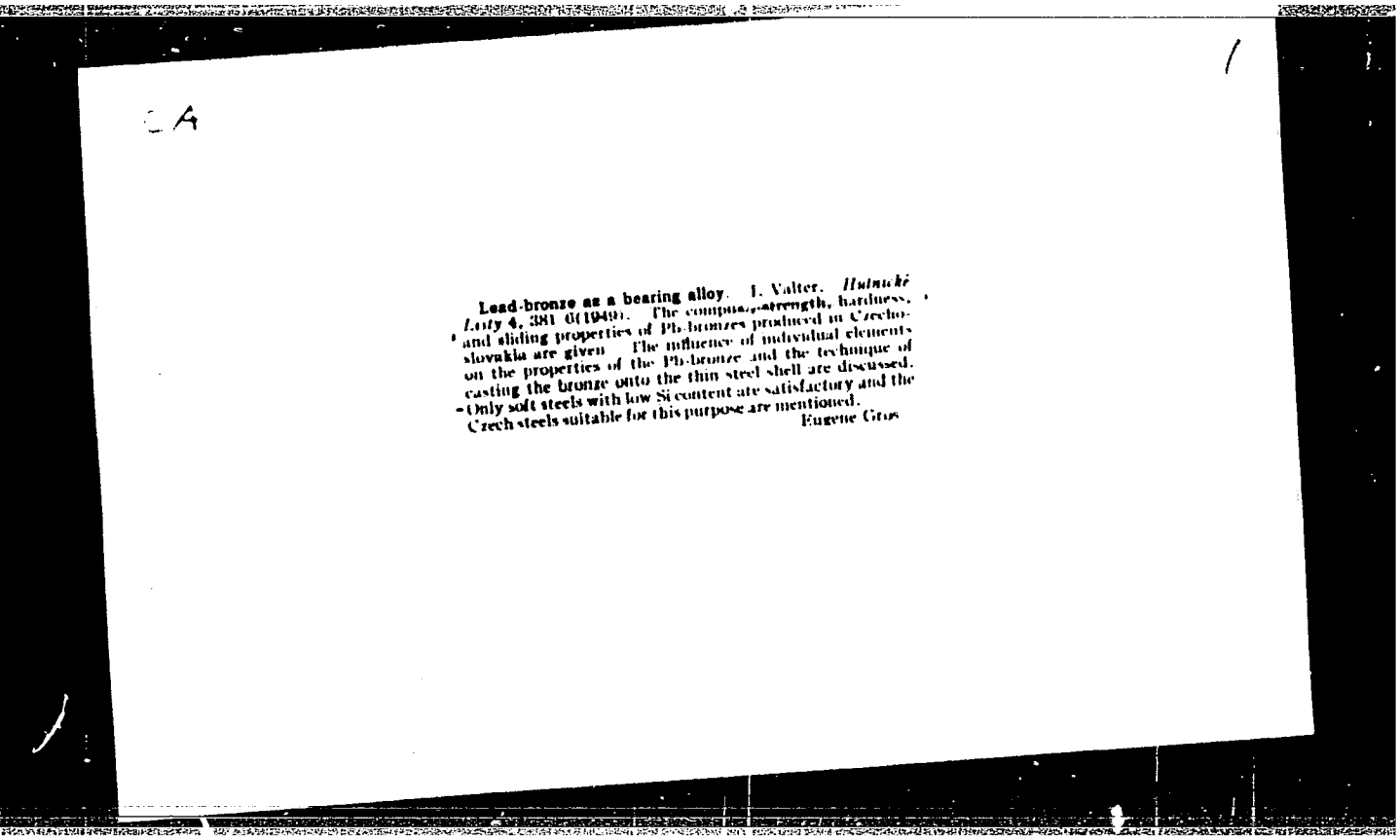
1. Upravlyayushchiy trestom Svinetsshakhtostroy (for Markus).
2. Nachal'nik otdela planirovaniya truda i zarabotnoy platy tresta Svinetsshakhtostroy (for Val'ter).

M

2

Lead-Bronze as a Bearing Alloy. J. Valter (*Hutnické Listy*, 1949, 4, 381–386; *C. Abs.*, 1950, 44, 3866).—The composition, strength, hardness, and frictional properties of lead-bronzes produced in Czechoslovakia are given. The influence of individual elements on the properties of the lead-bronze and the technique of casting the bronze on to the thin steel shell are discussed. Only soft steels with low silicon content are satisfactory, and the Czech steels suitable for this purpose are mentioned.

Feb. 1957



CA

1

Lead-bronze as a bearing alloy. J. Valter. *Hutnické Listy* **4**, 381–6(1949). The composition, strength, hardness, and sliding properties of Pb-bronzes produced in Czechoslovakia are given. The influence of individual elements on the properties of the Pb-bronze and the technique of casting the bronze onto the thin steel shell are discussed. Only soft steels with low Si content are satisfactory and the Czech steels suitable for this purpose are mentioned.
Eugene Grus

1

DYTRYCH, Josef, inz.; VALTER, Jiri, inz.

What brought the technical development to the National Enterprise TON. Drevo 18 no.2:64-67 F '63.

1. TON, n.p., Bystrice pod Hostynem.

Valter, Jiri, inz.

Dipping chairs in acid-hardening lacquers. Drevo 18 no.7: 263-264 Jl '63.

1. TON, N.P., Bystrice pod Hostynem.

VALTER, Libor, promovany ekonom.
Activity of the Commission for Agricultural Economy. Vestnik CSAZV 7 no.10:531-533 '60. (EEAI 10:3)
(Czechoslovakia--Agriculture)

VALTER, Libor, promovany ekonom

Conference on the introduction of cost accounting method and fixed wages on collective farms. Vestnik CSAZV 8 no.4:248-250 '61.
(EEAI 10:6)

(Czechoslovakia--Collective farms)

VAL'TER, L. L.

Dissertation: "Calculation of Steel Double-Hinged Arches With a Maximum Load." Cand Tech Sci, Leningrad Engineering Construction Inst and Leningrad Shipbuilding Inst, Leningrad, 1954. Referativnyy Zhurnal--Mekhanika, Moscow, May 54.

SO: SUM 284, 26 Nov 1954

SOV/124-57-4-4737

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 124 (USSR)

AUTHOR: Val'ter, L.L.

TITLE: A Graphical Method of Determining the Ultimate Loading of a Steel Rod Subjected to the Combined Action of a Bending Moment and a Longitudinal Force (Graficheskiy sposob opredeleniya predel'noy nagruzki dlya stal'nogo sterzhnya pri sovmestnom deystvii izgibayushchego momenta i prodol'noy sily)

PERIODICAL: Tr. Leningr. korablestroit. in-ta, 1955, Vol 16, pp 56-59

ABSTRACT: The author presents an elementary graphical-analytical method for determining the longitudinal force under conditions of eccentric tension or compression of a section for a prescribed value of the ratio $M/N = e$, where M is the bending moment and N the longitudinal force. It is assumed that a section of area F and having an arbitrary shape has attained a limiting-state condition, i.e., that a plastic hinge has been formed; this condition is characterized by a normal-stress distribution diagram in the shape of two rectangles of opposite sign with an ordinate σ_T, where σ_T represents the yield point of the material. It is also assumed that simple flexure obtains. The

Card 1/2

A Graphical Method of Determining the Ultimate Loading of a Steel Rod (cont.)

solution found by the author for an arbitrary cross-sectional shape is erroneous. The author determines the bending moment with the aid of the formula $M = \sigma_T F_1 r$, where F_1 is the smaller of the two areas into which the area F is subdivided by the neutral axis and r is the distance between the centers of gravity of the area F_1 and an area $F_2 = F_1$ laid out on the opposite side of the section. This formula is valid only if the moment of the remaining area $F - 2F_1$, taken about the line that divides the section into two equal parts, is equal to zero, a condition which occurs only in the case of sections with an axis of symmetry perpendicular to the plane of action of the bending moment.

S. V. Boyarshinov, M. I. Gorbunov-Posadov

Card 2/2

124-57-2-2447

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 2, p 132 (USSR)

AUTHORS: Iskritskiy, D. Ye., Val'ter, L. L.

TITLE: The Strength of the Terminal Coupling Link of an Anchor Chain in the Elastic and the Plastic Range (Raschet na prochnost' kontsevogo soyedinitel'nogo zvena yakornoy tsepi v uprugoy i plasticheskoy stadii)

PERIODICAL: Tr. Leningr. korablestroit. in-ta, 1955, Vol 16, pp 60-75

ABSTRACT: Examination of the terminal coupling link of a chain, equipped with a stud link. The calculation is based on a schematic non-hinged semicircular arch with clamped ends. The loading is assumed to be uniformly distributed over a 90-degree apex angle. The following loads were investigated: 1) the load that causes the phenomenon of creep; 2) the load that corresponds to the formation of plastic hinging; and 3) the rupture load. It is noted that the computed rupture load agrees quantitatively with that determined experimentally (within 3.5%).

Card 1/1 1. Anchor chains--Equipment 2. Anchor chains --Mechanical properties 3. Couplings--Elasticity 4. Couplings--Plasticity

K. Ya. Mutsenek

VAL'TER L. Ya., [illegible] and [illegible]
RYBNOE KHOZ. 1952, 5 (56-59)

Analyses for thiamine, riboflavin, and nicotinic acid are given for production-type fish products (canned) made in U.S.S.R. Thiamine declines after prolonged sterilization; nicotinic acid behaves similarly, but riboflavin usually shows a rise after heat sterilization.

Kosolapoff (Chem. Abstr.)

SO: Excerpta Medica Section XVII Vol 1 No 1

GRZHIVO, V.S., kandidat tekhnicheskikh nauk; VAL'TER, L.Ya., mladshiy nauchnyy sotrudnik.

Accelerated method for determining the amount of dry matter in canned vegetables. Ref.nauch.rab. VNIIKP no.2:36-40 '54. (MLRA 9:4)
(Vegetables--Preservation) (Food--Analysis)

GRZHIVO, V.S., kandiat tekhnicheskikh nauk; NEMETS, S.M., starshiy nauchnyy sotrudnik; VAL'TER, L.Ya., mladshiy nauchnyy sotrudnik; SKOPCHENKO, G.A., mladshiy nauchnyy sotrudnik.

Nutritive value of canned foods. Trudy VNIIKP no.3:55-61 '54. (MLRA 9:8)

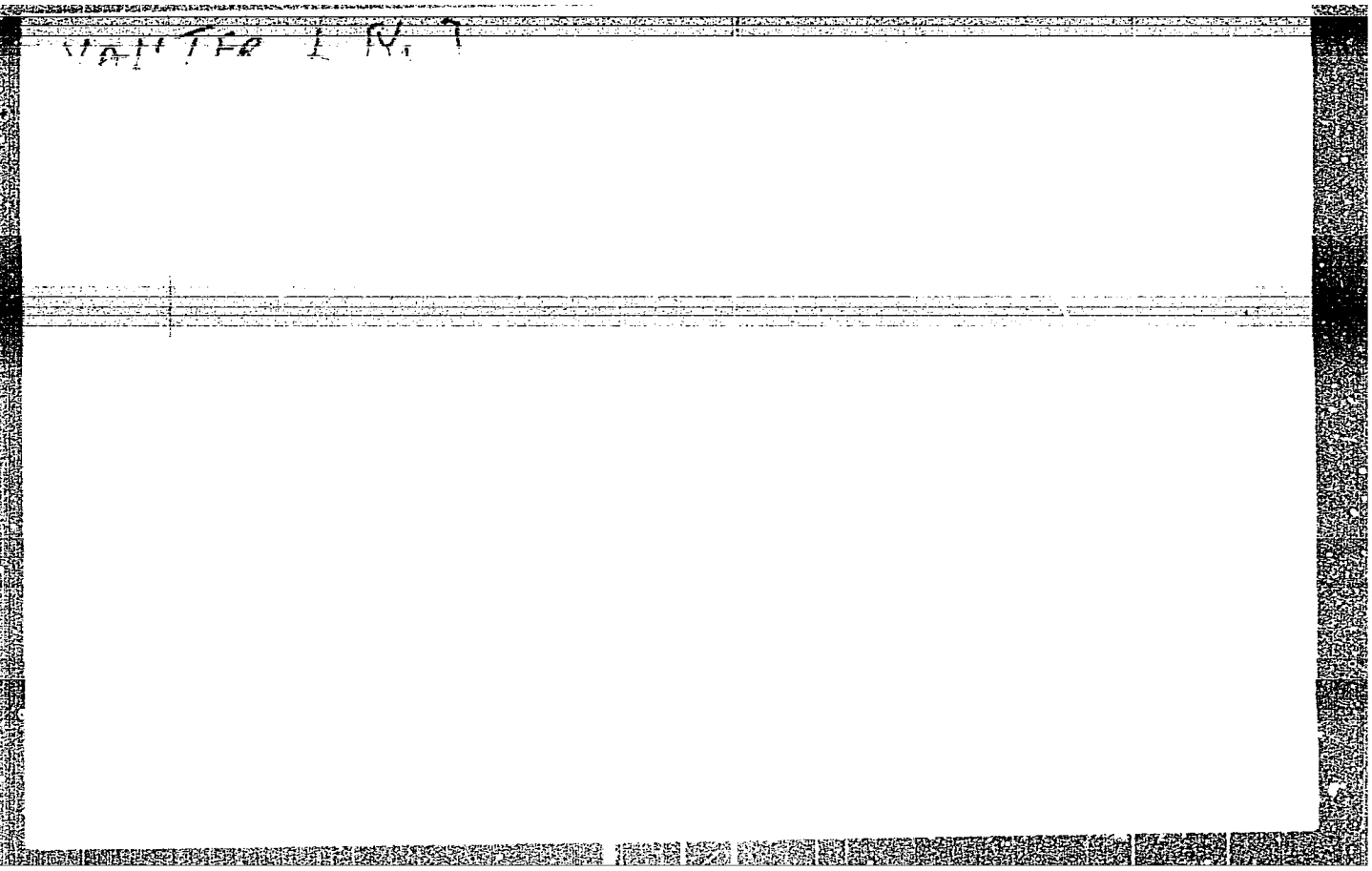
(Food, Canned)

VALTER, L. Ya.

GRZHIVO, V.S., kandidat tekhnicheskikh nauk; NEMETS, S.M., starshiy nauchnyy sotrudnik; VAL'TER, L.Ya., mladshiy nauchnyy sotrudnik; SKOPCHENKO, G.A., mladshiy nauchnyy sotrudnik.

Chemical changes in tomatoes during processing. Trudy VNIIKP no.3: 88-99 '54. (MLRA 9:8)

(Tomatoes) (Food--Analysis)



GRZHIVO, V.S., kandidat tekhnicheskikh nauk.; VAL'TER, L.Ya., mladshiy nauchnyy sotrudnik.

Rapid determination of the content of dry substances in canned foods. Ref. nauch. rab. VNIIKOP no.3:32-36 '55. (MLRA 9:11)
(Food--Analysis)

VALTER, Medard, okleveles gepeszmernok, fomernok

Economy in motor vehicle renewal. Kozl tud es LA no. 7:295-300 Jl '64.

1. Main Directorate of Automotive Transportation, Ministry of Transportation and Postal Affairs, Budapest.

VALTER, M.

Labor norms in the automobile repair industry. p. 5.
AUTO MOTOR, Budapest, Vol. 3, no. 13, July 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955, Uncl.

RAMAN, M.; VAL'TER, M., red.; PAEGLIS, Ya.[Paeglis, J.], tekhn. red.

[Use of liquefied gases in the Latvian S.S.R.] Ispol'zovanie szhizhennykh gazov v Latviiskoi SSR. Riga, TSentral'noe biuro tekhn. informatsii, 1960. 6 p. (MIRA 14:12)
(Latvia--Liquefied petroleum gas)

VAL'TER, M.[Valters,M.], red.; PAEGLIS, Ya. [Paeglis, J.], tekhn. red.

[Work practices of efficiency experts of the Latvian Electric Power System] Iz opyta raboty ratsionalizatorov sistemy "LATVENERGO." Riga, TSentr.biuro tekhn. informatsii, 1960. 7 p. (MIRA 14:12)

1. Latvian S.S.R. Valsts zinatniski tehniska komiteja.
(Latvia--Electric lines--Testing)
(Latvia--Electric power distribution)

ANTONOV, V.; BEZRUKOV, A.; VAL'TER, M., red.; PAEGLIS, Ya., tekhn.red.

[Casting of diesel engine cylinder heads in shell molds; practices of the diesel engine manufacturing plant in Riga] Otlivka golovok tsilindrov dizelei v obolochkovye formy; opyt Rizhskogo dizelestroitel'nogo zavoda. Riga, TSentr. biuro tekhn.informatsii, 1960. 15 p. (MIRA 14:12)

(Shell molding (Founding)) (Riga--Diesel engines)

ORLOV, V.; VAL'TER, M., red.; PAEGLIS, Ya.[Paeglis, J.], tekhn. red.

[Cleaning of steam boilers with acids; practices of the Riga Ship Repairing and Shipbuilding Plant of the Ministry of the Fleet] Kislotnaia ochistka parovykh kotlov; opyt Rizhskogo sudoremontno-sudostroitel'nogo zavoda MMF. Riga, TSentr. biuro tekhn. informatsii, 1960. 25 p. (MIRA 14:11)
(Riga—Boilers, Marine—Maintenance and repair)

DOMBROVSKAYA, Yu. F.; VAL'TER, .M.; CHECHULIN, A.S.; DOMBROVSKIY, A.N.; ROGOV, A.A.

Role of the age factor in hypoxemic states. (Clinico-experimental studies). Acta med. hun. 15 no.1:99-115 '60.

1. Klinika detskikh bolezney i TSentral'naya Nauchno-issledovatel'skaya Laboratoriya imeni S. I. Chechulina 1 Moskovskogo Ordena Lenina Meditsinskogo Instituta imeni I.M.Sechenova.

(ANOXIA)
(AGING)

GURFINKEL', V.S., otv. red.; VAL'TER, M.[Valters, M.], red.;
ROZE, A., tekhn. red.

[Electronics in medicine] Elektronika v meditsine; sbornik materialov. Riga, TSentr. biuro tekhn. informatsii Latviiskoi SSR, 1962. 260 p. (MIRA 16:11)

1. Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi im. A.S.Popova.
(MEDICAL ELECTRONICS)

BURKOVSKIY, Ye.; GEORGIYEVSKAYA, G.; LEVERTOV, V.; YUDIN, S.; VAL'TER, M., red.; INKIS, R., tekhn. red.

[Signaling of damages in overhead electric power distribution networks] Telesignalizatsiia povrezhdenii v vozdushnykh raspredelitel'nykh setiakh; energetika. Riga, TSentr. biuro tekhn. informatsii, 1962. 10 p. (MIRA 16:11)

(Electric lines--Overhead)
(Electric power distribution)

BELOUSOV, A.; VAL'TER, M., red.; INKIS, R., tekhn. red.

[Organizing technical control in machinery plants]Voprosy organizatsii tekhnicheskogo kontrolia na mashinostroitel'nykh zavodakh. Riga, TSentr. biuro tekhn. informatsii, 1962. 17 p. (MIRA 16:3)

(Production control) (Machinery industry)

CHERNOV, V.; VAL'TER, M.[Valters, M.], red.; INKIS, R., tekhn. red.

[New method for welding aluminum strands of electric cables] Novyi sposob paiki aliuminievykh zhil kabelia; opyt Rizhskikh gorodskikh elektrosetei "Latvenergo" (energetika). Riga, TSentr. biuro tekhn. informatsii, 1962. 5 p. (MIRA 16:4)

(Electric lines--Welding)
(Electric cables--Welding)

VITOLIN', O.[Vitolins, O.]; VAL'TER, M.[Valters, M.], red.; ROZE, A., tekhn.red.

[Effect of small angles of inclination of the bottom die cavity on the economic accuracy of forged parts and the life of the die]Vliianie malykh uglov uklona rabochego otverstiia matritsy na ekonomichnuiu tochnost' shtampovannykh detalei i srok sluzhby shtampa; radioelektrotekhnicheskaia i metalloobrabatyvaiushchaia promyshlennost'. Riga, TSentr. biuro tekhn. informatsii, 1962. 15 p. (MIRA 16:4)
(Forging) (Dies (Metalworking))

USSR / Farm Animals. Wild Animals. Q-4

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 45265

Author : Val'ter, M. V.
Inst : Not given
Title : The Anatomy of the Thymus Gland of Silver-Black Foxes.

Orig Pub : Tr. Mosk. vet. akad., 1956, 18, 3-9.

Abstract : The thymus gland was studied in 183 foxes aged up to 11 years. The thymus gland increases continuously up to the age of 5 months when its length attains 7-8 cm., and its width 4 - 4.5 cm. These dimensions are maintained thereafter; they do not depend on the degree of the involution of the thymus. The maximal variation in the weight of the thymus is observed in the newborn pups, and at the age of 8-9 months and 1-2 years. The weight of the thymus in relation to the body weight constitutes in the newborn 1.75%, at the age of 5 months 1.06%, at the age of 8-9 months 0.49%, and at

Card 1/2

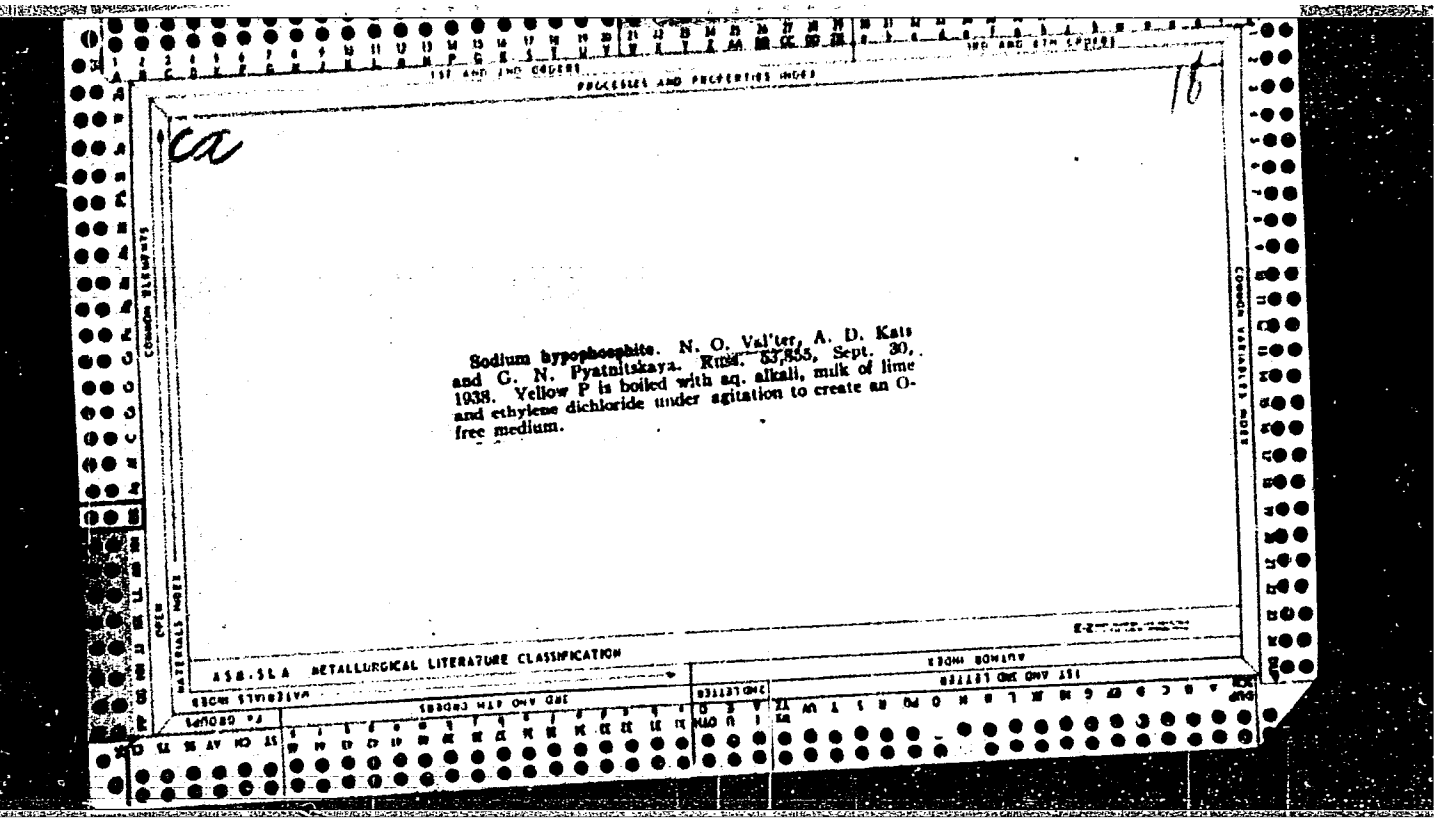
USSR / Farm Animals. Wild Animals. Q-4

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 45265

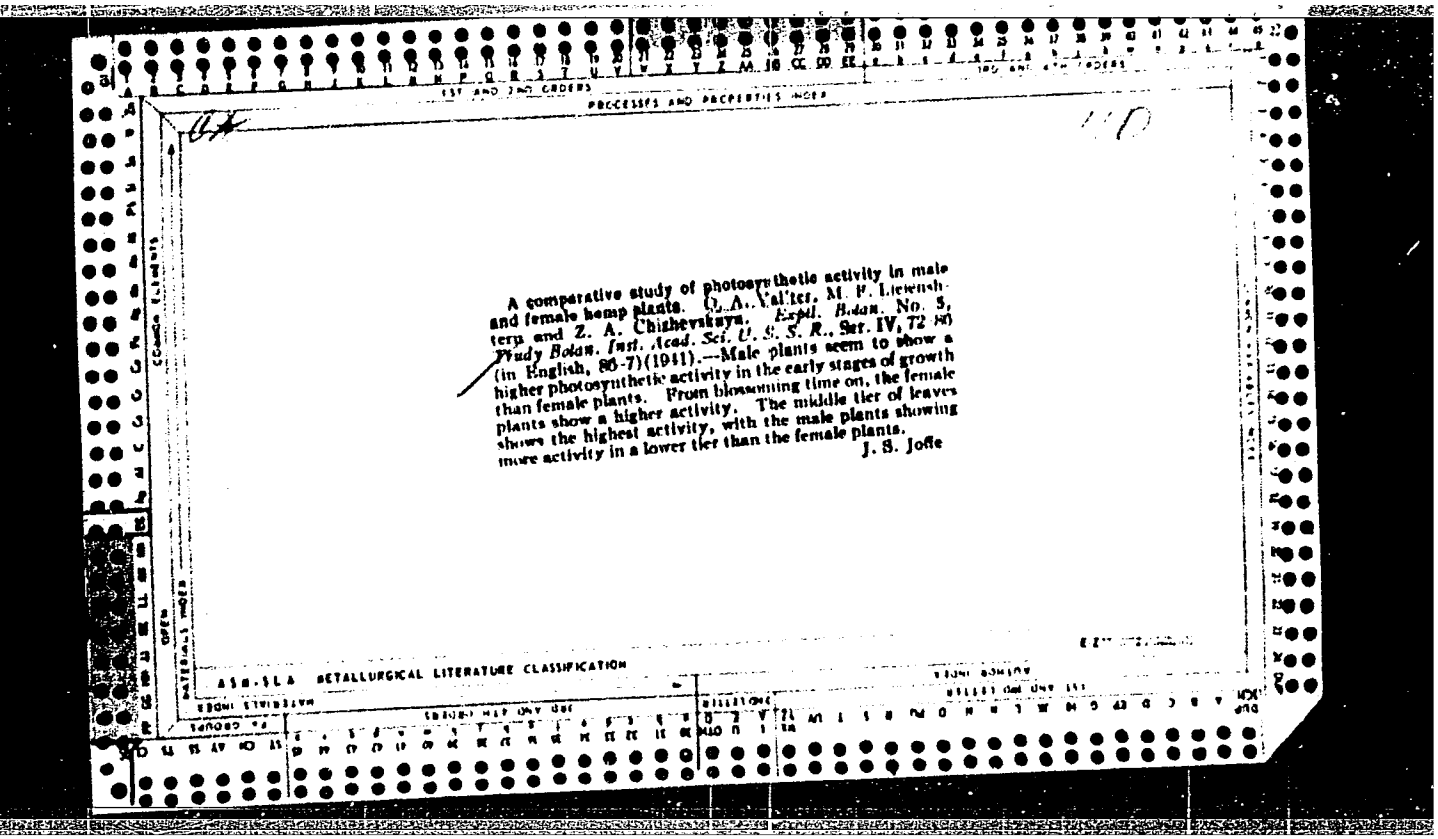
Abstract : the age from 9 to 10 years 0.14%. The thymus is innervated by the vagus sympathetic nerves and is supplied by the arteries which arise from the left and right internal thoracic arteries and from the common humerocephalic stem. The veins of the thymus empty into the anterior vena cava and into the right and left interior thoracic veins.

Card 2/2

VAL'TER, M. V. Cand Biol Sci -- (diss) "Age-related changes of the thyroid gland of silver-black foxes." Mos, 1957. 23 pp 21 cm. (Min of Higher Education USSR. Mos Vet Acad), 140 copies (KL, 24-57, 116)



Sodium hypophosphite. N. O. Val'ter, A. D. Kats and G. N. Pyatnitskaya. Russ. 53,855, Sept. 30, 1938. Yellow P is boiled with aq. alkali, milk of lime and ethylene dichloride under agitation to create an O-free medium.



A comparative study of photosynthetic activity in male and female hemp plants. O. A. Valter, M. F. Lievenshtern and Z. A. Chizhevskaya. *Exptl. Botan. No. 5, Trudy Botan. Inst. Acad. Sci. U. S. S. R., Ser. IV*, 72-80 (in English, 86-7)(1941).—Male plants seem to show a higher photosynthetic activity in the early stages of growth than female plants. From blossoming time on, the female plants show a higher activity. The middle tier of leaves shows the highest activity, with the male plants showing more activity in a lower tier than the female plants.

J. S. Joffe

VAL'TER, Oskar Antonovich; PINEVICH, Lidiya Mitrofanovna; VARASOVA, Natal'ya Nikolayevna; VOROB'YEV, F.I., red.; CHUNAYEVA, Z.V., tekhn.red.

[Practical work in the physiology of plants with principles of biochemistry] Praktikum po fiziologii rastenii s osnovami biokhimii. Izd. 3-e. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1957. 340 p.
(Plant physiology)

S/137/62/000/001/005/237
A060/A101

AUTHORS: Bul'skiy, M.T., Val'ter, O.I., Skrebtsov, A.M., Kostyuk, V.A., Sviridenko, F.F., Cherepivskiy, A.A.

TITLE: Use of radioactive isotopes for the investigation of the production technology at the Azovstal' plant

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 1, 1962, 6, abstract 1V41 (V sb. "Radioakt. izotopy i yadern. izlucheniya v nar. kh-ve SSSR, v. 3", Moscow, Gostoptekhizdat, 1961, 130 - 132)

TEXT: The authors consider the problem of applying radioactive isotopes in the blast-furnace, open-hearth furnace, rolling practice. The most important researches carried out at the plant were: 1) the study of the operation of open-hearth furnaces when the liquid finishing slag from the preceding heat was left in the furnace; 2) the study of the expediency of using incompletely burned lime instead of limestone in the charge of open-hearth furnaces; 3) the study of the quantity of slag during the pure ebullition period of the vat upon the

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S/137/62/000/001/005/237
A060/A101

Use of radioactive isotopes ...

quality of the steel smelted; 4) the determination of the quantity of exogeneous nonmetallic impurities in rail steel. The utilization of radioactive isotopes for γ-ray defectoscopy is described.

N. Yudina

[Abstracter's note: Complete translation]

Card 2/2

S/137/61/000/012/074/149
A006/A101

AUTHORS: Val'ter, O.A., Kostyuk, V.A., Kologrivov, N.P., Yashchenko, Z.A.

TITLE: Studying the nature of metal deformation during rolling with the aid of radioactive isotopes

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 1-2, abstract 12D6 (V sb. "Radioakt. izotopy i yadern. izlucheniya v nar. kh-ve SSSR, T. 3", Moscow, Gostoptekhizdat, 1961, 207 - 209)

TEXT: The investigation was made during the rolling of P-50 (R-50) type rail sections from an ingot weighing 9.76 tons, and of a Nr.36 double Tee beam section, rolled from a killed steel ingot weighing 6.75 tons. The ingots were rolled in conventional order. The nature of metal deformation in these sections was studied with the aid of the P^{32} radioactive isotope. The P^{32} isotope was introduced by separate portions and at certain intervals into the mold with the molten metal. Thus a series of zones were obtained during the crystallization process. The deformation of these zones during rolling should reflect the nature of the flow and the metal. A method was developed to study the deformation of

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S/137/61/000/012/074/149
A006/A101

Studying the nature of metal deformation ...

composite rolled sections and data were obtained which are of practical interest for calibrating operators when developing new and corrected existing grooves.

N. Yudina

[Abstracter's note: Complete translation]

Card 2/2

KOSTYUK, V.A.; PEREKRESTOV, V.I.; BUL'SKIY, M.T. [deceased]; VAL'TER, O.I.; KISLOV, N.A.; TSVETKOV, P.M.; AVRAMOV, V.M.

Rapid repair of the hearth bottom fritting of tilting open-hearth furnaces. Stal' 23 no.8:707-710 Ag '63. (MIRA 16:9)
(Open-hearth furnaces--Maintenance and repair)

KOSTYUK, V.A.; SKREBTSOV, A.M.; VAL'TER, O.I.

Studying conditions of fritting and wear of hearth bottoms in tilting open-hearth furnaces. Ogneupory 28 no.3:115-118 '63. (MIRA 16:2)

1. Metallurgicheskiy zavod "Azovstal'".
(Open-hearth furnaces—Maintenance and repair)

MUSIYKO, A.S., akad.; GESHELE, E.E., doktor biologicheskikh nauk, prof.; VAL'TER, O.Yu.

Biology of the causative organisms of corn smut. Agrobiologiia no.4:579-582 Jl-Ag '60. (MIRA 13:8)

1. Vsesoyuznyy selektsionno-geneticheskiy institut, Odessa.
(Smuts) (Corn (Maize)--Diseases and pests)

RUMANIA / Chemical Technology. Chemical Products and Their Application--Chemical Engineering

Abs Jour: Ref. Zhur--Khimiya, No 3, 1959, 8470

Author : Raseev, S. D., Feyer-Hoffman, S., Valter, P., Verman, L.

Inst : Not given

Title : Hydrodynamics of a Pseudo-liquified Layer. I. Theoretical Conclusions on the Ratio between Velocity of Liquid or Gas and the Volume Density of the Solid Particles in a Pseudo-liquified Layer. II. Experimental Verification of the System of Noncompressible Liquid--Homogeneous Solid Particles in the Absence of a Constant Influx of Particles into the Layer

Orig Pub: Studii si cercetari chim., 1957, 5, No 4, 569-579; 581-609

Card 1/3

RUMANIA / Chemical Technology. Chemical Products and Their Application--Chemical Engineering II-2

Abs Jour: Ref Zhur--Khimiya, No 3, 1959, 8470

coefficient of particles forms. In the second equation, the minus sign refers to the situation in which solid particles are constantly introduced into the lower part of the apparatus and are removed from the upper; the plus sign refers to the opposite condition. Considerations are given as to the poassibility of applying the given equations, providing the chemical reactions occur in the gaseous phase. II. Experimental verification of the stated equations which conformed satisfactorily with experimental data. --Author's abstract.

Card 3/3

H-2

Country : Rumania
Category :

46016

Abs. Jour. :

Author : Raseev, D.S.; Feyer, S.; Valter, P.; Verman, L.
Institut. : Institute of Petroleum, Gas, and Geology.
Title : Hydrodynamics of Fluidized Layer. II.Experimental Verification for an Incompressible Fluid and Homogenous Solid Particles in the Absence *

Orig Pub. : Lucrarile Inst. petrol, gaze si geol. Bucuresti, 1958, 4, 121-151

Abstract : See RZhKhim, 1959, No 3, 8470

Card:

H-2

57331

COUNTRY : Rumania
CATEGORY :

ABS. JOUR. : RZKhim., No. 16 1959, No.

AUTHOR : Vaiter, P. S.
INST. : Rumanian Institute for Food Research
TITLE : Unsteady State Heating

ORIG. PUB. : Lucrarile Inst Cercetari Aliment, 2, 79-90 (1958)

ABSTRACT : The author has compared the results from the calculation of a periodic heating process with the experimental data obtained at a plant for the production of vanillin.

C. Khimskiy

CARD: 1/1